

lipid composition analysis of the same samples that the large krill more preferably fed on the nanozooplankton, choanoflagellates, than the small krill. (p. 135-138).

STOCK AND QUANTITATIVE DISTRIBUTION OF THE ANTARCTIC KRILL (*EUPHAUSIA SUPERBA* DANA) IN THE ANTARCTIC OCEAN SOUTH OF AUSTRALIA IN JANUARY AND FEBRUARY 1984

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The quantitative distribution of the Antarctic krill (*Euphausia superba* Dana) was examined using a scientific echo sounder (SIMRAD EK-S120) on board the T/V UMITAKA MARU in the Antarctic Ocean south of Australia in January and February 1984, and the stock of the krill was estimated. The krill was abundantly found in a layer between 25 m and 85 m deep in the Antarctic Divergence Zone and its southern area. The mean density of the krill is 0.0287 g/m³ and 0.0712 g/m³ in each survey area in the first leg and the second leg, respectively. The density varies from place to place very much, for example from none to 0.2151 g/m³. The estimated stock in the cruise is about four times that in the FIBEX cruise by the UMITAKA MARU carried out in almost the same area. (p. 139-147).

NOTES ON CETACEAN SIGHTINGS DURING SIBEX CRUISE OF THE UMITAKA MARU III, 1983/84

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Cetacean sightings were carried out in January and February 1984 in the Southern Ocean south of Australia during the SIBEX cruise of the T/V UMITAKA MARU III. A total of 89 schools of 293 whales were sighted during the cruise which covered approximately 5,000 nautical miles. Of these whales, 71 of five baleen whale species and 159 of five toothed whale species were identified. Of the total baleen whales observed, minke whale (*Balaenoptera acutorostrata*) schools were found most frequently. Among toothed whales, sperm whale (*Physeter catodon*) schools were the largest in number. Approximately two-thirds of all the whales sighted were found in a definite area south of 60°S. Minke whales yielded the highest discovery rate in the area. Relative abundance of baleen whales and toothed whales in the Antarctic Ocean was discussed based on the present data. Differences in sighting efficiency between experts and non-experts were also criticized. (p. 149-154).

SEABIRDS IN THE AUSTRALIAN SECTOR OF THE SOUTHERN OCEAN, JANUARY AND FEBRUARY 1984

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Sightings of seabirds were carried out during the period from November 1983 to March 1984 as a part of BIOMASS program. In this observation, 3 species of Spheniscidae, 8 species of Diomedidae, 20 species of Procellariidae, 4 species of Hydrobatidae, 2 species of Stercorariidae, 2 species of Laridae, a single species of Sulidae and unidentifiable species of genera *Pachyptila* and *Pelecanoides* were recorded. Distribution patterns of most species were similar to the previous information. However, King Penguin was recorded from 64°S and Royal Albatross from 61°S. White-chinned Petrel was very few and Short-tailed Shearwater was very common near the Antarctic Convergence. (p. 155-165).